

SHIP SYSTEM  Remote Operating Gear	SUBSYSTEM	MRC CODE  R-	
SYSTEM	EQUIPMENT  Hydraulic Fluid Operating Valve	RATES GS-11/12	M/H 24.0
MAINTENANCE REQUIREMENT DESCRIPTION 1. Conduct SEMAT assessment of hydraulic fluid control stations, hydraulic actuators. 2. Test operation at hydraulic fluid control station, at the valve and hydraulic actuator. 3. Test operation of manual override (if applicable).		TOTAL M/H 24.0 ELAPSED TIME	
SAFETY PRECAUTIONS 1. Forces afloat comply with NAVOSH Program Manual for Forces Afloat, OPNAVINST 5100.19 series.			
TOOLS, PARTS, MATERIALS, TEST EQUIPMENT <b>MATERIALS</b> 1. [0866] Marker, tube type 2. [1102] Rags, wiping 3. [1170] Mirror, inspection 4. [1463] Wrench, adjustable, 8" heavy duty, 0.987" jaw open <b>TOOLS</b> 1. [0608] Hammer, hand, Machinist's ball peen, 24 OZ, nonsparking 2. [0892] Mirror, inspection, 2-1/4" dia glass, ajustable length handle 5. [2271] Flashlight, Type 3, style 1, explosive proof 6. [3886] Screwdriver, flat tip, 6" <b>MISCELLANEOUS</b> 1. Radio, Walkie-talkie (2) <b>NOTE:</b> Numbers in brackets can be referenced to Standard PMS Materials Identification Guide (SPMIG) for stock number identification.			
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PROCEDURE <b>NOTE 1:</b> Two assessors and man-hours assigned are average for DD class ships and may require adjustment for larger class of ship.			
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LOCATION		DATE August 1997	

PROCEDURE (Contd)

**Preliminary**

a. Compile the following documents before going on-board ship.

- (1) From the Damage Control Book, obtain a list of remote operated valves. The valve list should indicate:
  - (a) System
  - (b) Valve Number
  - (c) Valve Location
  - (d) Function
  - (e) Control Panel location
  - (f) Kind of valve
  - (g) Valve size
  - (h) Valve type
  - (i) Responsible Division
  - (j) Damage Control Classification
- (2) Copy of EOSS Diagram that shows the complete ROG for each system.

b. Accomplish the following on-board ship:

- (1) Review SEMAT 2-Kilos and ships CSMP reports. Add additional information if required and close out 2-Kilos/CSMP reports that are completed.
- (2) Contact ship's force in CCS to obtain two (2) Portable Radios and two (2) people from S/F to cycle valves.

**NOTE 2:** It is mandatory that ship's force personnel are present to cycle valves.

**1. Conduct SEMAT Assessment at Hydraulic Fluid Control Station and Hydraulic Actuators.**

- a. Assess all valves for any missing label plates, DC number, valve number, valve designation, DC classification, indicator limit switch and handwheel.
- b. Assess level sight gage, replenishment tank, drain plug, filter, valves and two hand pumps for any indication of leaks, cracks, breaks, damaged or missing parts.
- c. Assess valve operating mechanism for loose fittings.
- d. Assess operator for hydraulic leaks and valve for freedom of movement.
- e. Assess hydraulic system for rust, corrosion, deterioration, cracks and breaks.
- f. Assess the port one (1) isolation valve, port two (2) isolation valve and the bypass valve for: rust, corrosion, deterioration, leaks, cracks, broken or missing parts.

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PROCEDURE (Contd)

**2. Test System Operation at the Hydraulic Fluid Control Station and at the Valve and Hydraulic Actuator.**

**NOTE 3:** Assessors must establish communication between the remote station and the valve location before ship's force personnel cycle the valve.

**NOTE 4:** Before cycling any discharge or suction valve for fire pumps, check with CCS. Ensure main, secondary drain, and SW cooling valves are cycled in the correct order.

**NOTE 5:** Ensure the valve hydraulic actuator is in the remote position.

**WARNING:** Ensure valve can be operated without disrupting equipment, plant or system operation and will not cause flooding.

- a. Station a man at the remote station and a man at the valve(s). Establish communication.
- b. Turn pilot valve to open position and crank the hand pump until the pressure gage needle reaches the maximum (approx 600 PSI). Verify the 'OPEN' indicator light is on and the valve indicator limit switch indicates a fully opened position. Assess hydraulic system and valve for leaks.
- c. Turn Pilot valve to closed position and crank the hand pump until the pressure gage needle reaches the maximum (approx 600 PSI). Verify the 'CLOSED' indicator light is on and the valve indicator limit switch indicates a fully closed position. Assess hydraulic system and valve for leaks.
- d. Return pilot valve to the neutral position and stow crank handle.
- e. Return system to required readiness condition.

**3. Test Operation of Manual Override (If Applicable).**

**NOTE 6:** If resistance is encountered while engaging override lever, rotate valve wheel while maintaining an upward pressure on lever until lever engages with manual screw.

- a. Engage manual override.
- b. Rotate valve wheel, valve should operate freely.
- c. Rotate wheel in opposite direction, valve should operate freely.
- d. Rotate valve wheel and open valve to ensure freedom of operation.
- e. Compare mechanical dial position indicator on valve with remote operating station position indicator light. Valve position should be the same on both indicators, if indicators are applicable.
- f. Rotate valve wheel and close valve to ensure freedom of operation.
- g. Repeat step 3.e.
- h. Disengage manual override.
- i. Remove safety tag(s) from isolation valve(s), if applicable.
- j. Return system to readiness condition.

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PROCEDURE (Contd)

4. All discrepancies shall be noted on applicable SEMAT discrepancy identification forms (i.e. 2-Kilos or Material Assessment Form).

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